

## HESI A2 Nursing Entrance Exam Preparation Guide

The HESI A2 is an entrance exam for the Nursing Program at Germanna Community College. The exam has six sections: Reading Comprehension, Vocabulary, Math, Chemistry, Anatomy & Physiology, and Critical Thinking. This handout will discuss each section of the HESI A2 exam and provide resources students can use to prepare for it.

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### Exam Overview

The HESI A2 exam is proctored by the Testing Center and information for scheduling an appointment can be found at <https://www.germannna.edu/testing/nursing-health-testing/>. Students will complete each section of the exam during one testing session. There is a four hour time limit to complete the exam. After completing a section, it will be scored before students can move on and start the next. While taking the exam, students cannot skip questions, nor will they be able to return to questions they have previously answered. However, students may use a basic on-screen calculator to complete the math portion of the test. Lastly, the exam can only be taken twice, with at least 14 days between the two attempts.

### Sections of the HESI A2 Exam

#### English

The English section of the HESI A2 contains two subsections: Reading Comprehension and Vocabulary. Each subsection contains 55 questions.

## **Reading Comprehension**

This subsection presents reading passages where students will have to:

- Identify the main idea and supporting details
- Use context clues to determine word meanings
- Decipher between fact and opinion
- Summarize part of a passage
- Make inferences based on the context of a passage

### *Helpful Academic Resources*

- [Mometrix – Reading Comprehension Practice](#)
- [Lumen Learning – Main Ideas and Supporting Details](#)
- [Khan Academy – Using context clues to figure out new words](#)
- [St. Joseph’s College – Fact vs Opinion](#)
- [McGraw Hill – Fact and Opinion Exercise](#)
- [Lumen Learning – Making Inferences](#)

## **Vocabulary**

This subsection involves determining the meaning of general English and nursing vocabulary words.

### *ACE Helpful Handouts*

- [Guide to Common Medical Terminology](#)
- [Helpful Resources for ESL Nursing Students](#)

### *Helpful Academic Resources*

- [CLPNA – Medical Abbreviations Game](#)
- [University of Kent – Vocabulary Test](#)

## **Math**

The Math section of the HESI A2 exam contains one section: Basic Math. There are 55 questions in this section.

## Basic Math

This subsection checks for an understanding of the math needed to succeed in the nursing field.

Students will be expected to:

- Answer numerical or word problems that require the addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals
- Convert between decimals, fractions, and percents
- Set up and solve proportions
- Perform general unit conversion, such as milliliters to ounces
- Convert between the 12-hour clock and military time as well as Roman numerals and numbers
- Complete some basic algebra problems

### *ACE Helpful Handouts*

- [Order of Operations and Signed Numbers](#)
- [Divisibility Rules](#)
- [Squares, Cubes, and Their Roots](#)
- [Radicals and Fractional Exponents](#)
- [Exponents, Radicals, and Scientific Notation](#)
- [Introduction to Fractions](#)
- [Decimals, Fractions and Percents](#)
- [Metric Conversion](#)
- [Nursing Conversions and Formulas](#)
- [Resources for Reviewing Basic Math Skills](#)
- [Introduction to Word Problems](#)

### *Helpful Academic Resources*

- [Pre-Algebra Tutorials](#)
- [Khan Academy – Algebra Basics](#)

- [The Academic Center for Excellence's Math Course Resources Webpage](#)

### **Science**

The Science section of the HESI A2 exam contains two subsections: Chemistry and Anatomy & Physiology. Each subsection contains 30 questions.

### **Chemistry**

This subsection tests for an understanding of several chemical processes and terminology including:

- Temperature
- Atomic structure and the periodic table
- Chemical equation terminology
- Solutions and concentrations
- Stoichiometry
- Chemical reactions
- Chemical bonding
- Nuclear chemistry

### *ACE Helpful Handouts*

- [Color Periodic Table](#)
- [Aqueous Reactions](#)
- [Balancing Chemical Equations](#)
- [Chemical Conversions and Problems](#)
- [Conversions and Dimensional Analysis](#)
- [Intermolecular Forces](#)
- [Naming Compounds](#)
- [Oxidation-Reduction Reactions](#)
- [Polyatomic Ion List](#)
- [Significant Figure Rules](#)

### *Helpful Academic Resources*

- [Dynamic Period Table](#)
- [Science Geek – Interactive Chemistry Quizzes](#)
- [Khan Academy – Chemistry](#)

### **Anatomy & Physiology**

This subsection covers the following anatomy & physiology concepts:

- Terminology
- Cytology and histology
- Anatomical structures
- Anatomical systems

#### *Helpful Academic Resources*

- [Get Body Smart](#)
- [Khan Academy – Anatomy and Physiology](#)
- [Purpose Games – Medicine](#)
- [San Diego Mesa College – Human Anatomy](#)
- [University of Minnesota – Web Anatomy](#)
- [Anatomy Arcade – Whack a Bone](#)
- [Visibly Body – Interactive Virtual Anatomy Tool](#)

### **Critical Thinking**

This section examines critical thinking abilities in healthcare scenarios. It contains 30 questions and is broken down into the following categories:

- Using facts to solve healthcare issues
- Assessing ethical, moral, and legal problems in healthcare
- Examining different points of view to resolve an argument
- Analyzing patient data

#### *Helpful Academic Resources*

- [Kozier & Erb’s Fundamentals of Nursing \(10e\) – Ch. 10 Critical Thinking and Critical Reasoning](#)

- [AHRQ – Sample Medical Record](#)

### **Free Comprehensive HESI A2 Practice Exams**

The webpages below link to free practice exams for the HESI A2 exam. Some practice exams are in an online quiz format. Others are in video format and include worked out problems as well as answer explanations.

- [NurseHub HESI A2 Practice Tests by Subject](#)
- [HESI A2 Practice Test by Subject](#)
- [Test Prep Review HESI A2 Practice Tests](#)
- [All Healthcare Careers HESI A2 Practice Tests](#)
- [Mometrix Test Preparation HESI A2 Practice Tests and Study Guides](#)